

DETAILED ACTION

1. Claims 1-14 are pending in the following action, with Claims 10-14 withdrawn from consideration.

Response to Arguments

2. Applicant's arguments filed 8 May 2008 have been fully considered but they are not persuasive. While in light of the arguments as well as the interview held on 12 June 2008, the examiner understands that the invention sought to be claimed is plug and a receptacle combined into one separable unit, the breadth of the current claim language does not clearly require that interpretation. The teachings of Kao in view of what is old and well known in the art teach the limitations of a plug and a receptacle combining as a connector, with the plug being inserted into the receptacle. The claims as written do not require that the plug component and receptacle component are connected via an interface other than the plug and receptacle. Therefore, the previously applied rejections under 35 USC 103 are maintained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0033726 ("Kao") in view of what is old and well known in the art.

5. As for Claim 1, Kao teaches a card type USB connector (Figure 13) comprising a card type plug having a plurality of pins on top of the plug body and a card type receptacle for receiving the card type plug comprising a plurality of receptacle pins corresponding to the pins on the plug body. Kao does not explicitly teach that the pins are electrically turned on or off according to the contact between the plug and receptacle, but the examiner takes OFFICIAL NOTICE that it is old and well known in the art that USB signal pins are not electrically active until a power circuit as been completed, and that does not occur until the USB power rails connect with each other in the plug and the receptacle.

6. As for Claim 2, Kao further teaches that the plug and receptacle are polygonal in shape (Figure 13).

7. As for Claims 4-5 and 7-8, Kao teaches the USB card type having a card type plug with a plurality of pins on top of the plug body and a card type receptacle for receiving the card type plug comprising a plurality of receptacle pins corresponding to

the pins on the plug body. However, Kao does not teach an adapter to convert from the USB card type to USB type A or USB type B. The examiner takes OFFICIAL NOTICE that it is notoriously well known in the art that one electrical standard may have multiple types of connectors and it is necessary to provide for a way of physically converting one of the connectors via an adapter to match the other. It would have been obvious to one of ordinary skill in the art at the time of the invention to have manufactured an adapter to convert a card type USB connection as taught by Kao to a standard USB type A or type B connection to allow for communication between devices that utilize different connector types.

8. As for Claims 3, 6, and 9, Kao further teaches that the plug has guide projections to block a reverse insertion into the receptacle (Figures 8-10).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy S. Cerullo whose telephone number is (571)272-3634. The examiner can normally be reached on Monday - Thursday, 8:00-4:00; Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2111

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. C./
Examiner, Art Unit 2111

/Paul R. Myers/
Primary Examiner, Art Unit 2111